

# SCIENCE & EDUCATION Impact

Benefits From the USDA/Land-Grant Partnership

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## Looking Out for the Small Farm

Keeping the family in farming.

*When small farms disappear, so do schools, rural businesses, and sometimes even small towns. The continued vitality of many rural communities depends on the financial health of small, independent farms.*

*Although small-scale farmers make up 94 percent of all farms, they account for only 41 percent of farm income. The average farm with annual gross sales between \$50,000 and \$250,000 has a net cash income of only \$23,159. The U.S. Department of Agriculture (USDA) and the Land-Grant universities are working to improve the income and quality of life of small-scale farmers and ranchers and their communities.*

### Payoff

- **Networking.** Five small farmers worked with **North Carolina A&T** Extension specialists to add irrigation systems to their vegetable farms. The farmers then teamed up to buy irrigation equipment at a bargain rate and shared expenses and labor to install the systems. Each operation can expect increased sales of \$2,000 to \$3,000 per year from the collaboration.
- **An apple from the teacher.** Apple storage is difficult for small and medium-sized growers in the Midwest, where controlled-atmosphere storage units can cost more than \$1 million. **Minnesota** scientists developed the “Honeycrisp” apple variety, which keeps two to four times longer under normal refrigeration than other apples. Orchards are adopting the new variety at a record pace.
- **Entrepreneurial initiatives.** A program for part-time and limited-resource farmers in **North Carolina** has helped them diversify their operations. As a result of **North Carolina A&T** Extension programs in market development, direct sales, and other techniques of community-supported agriculture, nine participants generated \$129,000 in new farm income. A **Tennessee** program helped former tobacco farmers grow 373 acres of commercial vegetables. **Virginia State**

RESEARCH,  
EDUCATION, AND  
EXTENSION  
AT WORK

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Extension specialists are helping producers shift from bulk commodities to other enterprises. Fifty landowners increased their profits by 10 percent with specialty agricultural products.

- **Bees for rent.** After parasitic mites nearly wiped out all the honeybees in two counties, growers had to import hives to spur plant pollination. **North Carolina A&T** Extension specialists helped producers re-establish hives as a local money-making venture, leading to an increase in hives from 20 to 35 in one year and additional local income of more than \$3,000, not including honey sales, for the hive owners. In **Tennessee**, the mites cost beekeepers \$4 million in bees, medication, and lost honey. An Extension program helped cut hive losses from an average of 50 percent to 25 percent.
- **Get your goat.** Growing demand for goat meat has helped fuel a small-animal livestock industry in several Southern states, and the Land-Grant system is there to help. **Florida A&M** specialists helped 75 meat goat producers reduce feed costs by an average of \$652 per farm through the use of advanced grazing techniques and alternative feeds. Sixty producers reduced herd health costs by \$4.25 per breeding animal. **Alabama A&M** and **Auburn** Extension specialists helped 48 small-scale and part-time producers improve their sheep and goat operations, adding an average of \$7,200 of income.
- **Making hay.** Cattle producers in **Georgia** will benefit from university research that showed how they could rotate grazing lands and make an extra \$2,224 per cow-calf pair and \$74.80 per acre from existing pastures. A hay project demonstrated how reducing weed pressure could yield another \$100 of hay per acre. Feeding strategies helped **Montana** cattle make it through the winter and saved one producer \$9,000. By conservative estimates, the university program knocked \$100,000 off winter feed costs for participating producers. A **Wyoming Beef Basics** correspondence course helped 100 cattle novices realize an average cost savings of \$14 per year and better performance worth \$52,000. A **Utah** Extension agent helped a small hay grower earn “weed-seed free” certification. The hay is worth \$30 more per ton because it can be taken into USDA Forest Service-

designated wilderness areas on recreational horseback expeditions without spreading noxious weeds into sensitive environments.

- **Quality pays.** A participant in a **North Carolina A&T** economic development program started a direct-sales strawberry farm. Not only has the farmer grossed \$13,000 from his new business, his strawberries won top honors at a local strawberry festival.
- **High on hogs.** Traditionally, hog production has accounted for \$1 out of every \$4 of farm income — money that would be missed as small hog farms vanish and mega-farms spring up elsewhere. **Nebraska** swine researchers evaluated genetic lines of swine to see how breeding sows fared when kept inside and outside. The research showed that two genetic lines of swine housed outdoors produced litters equal in number and size to those housed in expensive confinement facilities. A **Purdue** project shows independent pork producers in **Indiana** how to band together to incorporate the technologies and economies the mega-farms enjoy. **Iowa** researchers evaluated the raising of hogs in pasture-based hoop structures and found that for small-scale operations the system was a viable alternative to confinement facilities.
- **Grain gain.** Extension specialists set up a network of grain elevators in **Iowa** with near-infrared grain analyzers that measure grain components. Thanks to the analyzers, growers with better products are getting better prices. In two years, farmers have earned an additional \$2 million in premium payments for enhanced levels of protein in corn and soybeans and for high levels of oil in corn.



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Cooperative State Research, Education, and Extension Service

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May 1998